

REMARKS

Applicant has now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of January 23, 2006.

In this response, Applicant amended selected claims to provide a more complete scope of protection for the present invention and present clarifying remarks believed to address the Examiner's rejections and place the claims in condition for allowance.

Reexamination and reconsideration are respectfully requested.

I. 35 U.S.C. §102(e) Rejections

Claims 1-3, 5 and 7 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0036749 to Petranek.

With respect to claim 1, as amended, Applicant respectfully submits that the subject matter differs from the art taught in Petranek. Claim 1, as amended, calls for an ink container comprising a housing having a chamber formed therein for receiving ink and a surface including an outlet passage communicating with the chamber and through which ink is dispensed. An air impermeable, non-porous seal member is received in the outlet passage. The seal member comprises raised portions on a first surface and a second surface, wherein the surfaces are adapted to be compressed when said seal member is installed in the outlet passage. The first and second surfaces are on opposite sides of the seal member.

Conversely, Petranek is directed to an ink-cleaner cartridge 10 with a disposable, flexible ink supply bag 16; and a plastic connector-fitting 18. The fitting includes opposite longitudinal sides including parallel ribs 28. The fitting 18 is thermally sealed to the bag 16, within an elongate opening 26 in the bag. During the thermal seal, a small amount of melted material from the bag flows between parallel ribs 28 along the opposite longitudinal sides of the fitting to provide a leak-proof seal between the bag and the fitting.

Petranek does not teach or suggest that the ribs 28 of the fitting 18 are compressed when the fitting is installed in the opening 26. Rather, melted material flows between the

ribs to form the seal. Petranek does not teach or suggest that the fitting 18 or ribs 28 themselves form an air impermeable non-porous seal. Thus, claim 1 and claims 2-15 dependent thereon are in condition for allowance.

Regarding claim 2, Applicant respectfully submits that Petranek fails to disclose substantially V-shaped raised portions located on first and second surfaces of the generally toroidal-shaped seal member. As indicated above, assuming, *arguendo*, that the fitting 18 of Petranek is the claimed seal, the fitting does not teach or suggest V-shaped portions. The ribs 28 are not shown or described as V-shaped. Therefore, it is respectfully submitted that claim 2 defines over the art of record and is in condition for allowance. Moreover, claim 2 depends from claim 1 and is in condition for allowance.

Regarding claim 3, Applicant respectfully submits that Petranek fails to disclose a cap member having a recess for receiving the outlet passage of the ink container housing surface. The Examiner states that elements 34 and 30 of Petranek teach a cap member having a recess for receiving the outlet passage 26 of bag 16. Such is not the case in Petranek. Applicant submits that Petranek teaches a rubber septum 30 inserted into an ink egress opening 32 in the snout 20 to plug the opening. A steel cap 34 is then press-fitted on the snout, the cap partially overlapping the septum to capture the septum. The cap has a center opening 36 which allows a hollow needle to pierce the septum in order to discharge an ink supply from the bag 16 when the cartridge is used in an ink jet printer. (See page 2, paragraph 42). Thus, septum 30 and cap 34 do not have a recess for receiving opening 26. Therefore, it is respectfully submitted that claim 3 defines over the art of record and is in condition for allowance. Moreover, claim 3 depends from claim 1 and is in condition for allowance.

Claim 5 has been amended to recite that the seal is adapted to be linearly compressed between the cap and the outlet passage. As mentioned for claim 1, the fitting 18 is not compressed to form the seal. Rather, melted material from the bag flows between ribs 28 to form a seal. Moreover, claim 5 depends from claim 1 and is in condition for allowance.

Claim 7 depends from claim 1 and is in condition for allowance.

II. 35 U.S.C. §103(a) Rejections

Claims 4 and 16-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Petranek in view of U.S. Patent Application Publication No. 2003/0081085 to Putman.

With respect to claim 4, as amended, Applicant respectfully submits that the subject matter differs from Petranek in view of Putman. Claim 4, as amended, requires that an outer terminal end of the outlet passage of the surface of the ink container housing comprise a rib extending at least partially along a circumference thereof for contacting and thermally bonding the cap to the outlet passage.

The Examiner concedes that Petranek fails to teach the outlet passage of the ink container housing comprising a rib for contacting and thermally bonding the cap to the outlet passage (see Office Action page 3). For that limitation, the Examiner relies on the teachings of Putman. However, Applicant respectfully submits that Putman fails to teach or even remotely suggest a rib extending at least partially along a circumference of an outer terminal end of an outlet passage for contacting and thermally bonding a cap to the outlet passage.

Conversely, with reference to Figure 2A of Putman, Putman teaches an outlet port 40 which depends from a bottom wall of the ink tank cartridge housing 10. The outlet port comprises a cavity or opening 42 through a pipelike member or chimney 44 which extends from the bottom wall of the housing. The opening is in communication with the chimney through an opening 36. A plurality of longitudinal ribs 46 are located along an outside wall of the chimney. (See page 2, paragraph 21). A cap 80 is cured onto the outer end of the chimney, such as by ultrasonic welding. A periphery wall 86 of the cap includes a plurality of slots 88 that align with and receive the ribs 46 extending radially outward from the ink outlet port. The cap is then ultrasonically welded to the outlet end of the chimney. (See page 2, paragraph 25). Accordingly, Putman fails to teach or even remotely suggest a rib extending at least partially along a circumference of an outer terminal end of an outlet

passage. Therefore, it is respectfully submitted that claim 4 now defines over the art of record and is in condition for allowance. Moreover, claim 4 depends from claim 1 and is in condition for allowance.

With respect to claim 16, as amended, Applicant respectfully submits that the subject matter differs from Petranek in view of Putman.

Claim 16, as amended, recites a method of sealing an outlet port of an ink container. A generally annular-shaped seal member is inserted into a counterbore of the outlet port formed at an outer terminal end portion of the outlet port. A cap member is placed over the outer portion of the outlet port. The seal member is linearly compressed said between the cap and the outlet port. The cap member is welded to the outlet port.

In contrast, as indicated above, Petranek discloses a fitting 18 configured to receive melted material from an ink bag 16 to seal the ink bag to the fitting. Petranek fails to show a generally annular-shaped seal member. Applicant further submits that Petranek fails to disclose a counterbore of the outlet port formed in the outer terminal end portion of the outlet port. In fact, the Examiner concedes that Petranek fails to teach a counterbore of the outlet port formed in the outer terminal end portion of the outlet port in the Office Action. (See Office Action page 5). Petranek also fails to teach linear compressing of the seal member between a cap and outlet in the outlet port. As indicated previously, Figures 1-3 of Petranek teaches that the fitting 18 is positioned in an opening 26 in the bag 16. During the thermal seal of the bag 16 to the fitting 18, a small amount of melted material from the bag flows between the longitudinal side ribs 26 of the fitting to provide a leakproof seal between the bag and the fitting. Accordingly, the fitting 18 is not linearly compressed between the steel cap 34 and the opening 26 of the ink bag 16.

Further, the Examiner concedes that Petranek fails to teach the welding of a cap member to the outlet port of the ink container (see Office Action page 3). For that limitation, the Examiner relies on the teachings of Putman. However, Applicant respectfully submits that Putman teaches a cap 80 ultrasonically welded onto an outer end of a chimney 44 which extends from a bottom wall of an ink tank cartridge housing 10. This

disclosure of Putnam is analogous to the press-fitting of the cap 36 of Petranek to the internal ink egress snout 20 extending from the fitting 18. Thus, assuming, *arguendo*, that the fitting 18 secured in the opening 26 of the ink bag 16 is a seal member, no cap member can be welded to the outlet port of the ink bag. Accordingly, it would not have been obvious to one of ordinary skill in the art to modify the ink container of Petranek, which again shows a fitting 18 located in the ink bag opening 26, with the cap 80 of Putman, which is configured to be ultrasonically welded to the chimney 44.

Accordingly, Petranek as modified by Putnam fails to teach or even remotely suggest the limitations of amended claim 16. Therefore, it is respectfully submitted that amended claim 16, and claims 17-22 dependent or ultimately dependent thereon, define over the prior art.

Moreover, Applicant respectfully disagrees with the Examiner's unsupported obviousness conclusions regarding Petranek and Putman in that the Examiner has failed to provide adequate motivation to modify Petranek with Putman. As the Examiner is aware, a *prima facie* case of obviousness is not established absent proper motivation. Simply because Petranek could be modified with Putnam is not motivation to modify and use the welding of the Putnam cap 80 to the chimney 44 to meet the limitations of amended claim 16.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claim invention where there is some teaching, suggestion or motivation to do so either in the references themselves or in the knowledge of one of ordinary skill in the art. In the present case, Applicant has found no teachings, suggestions or motivations in the references to modify Petranek with Putman as currently suggested by the Examiner. If the Examiner should contend otherwise, Applicant requests that the Examiner explicitly cite the column and line numbers from each of the references where such teachings, suggestions or motivations may be found.

Merely because claimed elements are individually found in the prior art, it does not necessarily follow that it would have been obvious to combine the elements from different

prior art references. Consequently, absent a motivation to combine or modify the references, it is irrelevant that the elements and/or limitations may be individually or separately known in the prior art.

Regarding claim 17, as amended, Applicant respectfully submits that Petranek in view of Putnam fails to disclose a seal member comprising ridges formed on a first and second surface of the seal member, wherein the ridges are contacted by the cap member and the outer terminal end portion of the outlet port during compression. Again, Petranek fails to teach linear compressing of the seal member between the cap and the outlet port formed in an outer terminal end portion in the outlet port. As indicated above, the Examiner further concedes that Petranek fails to teach an outlet passage comprising a rib for contacting and thermally bonding a cap to the outlet passage or ridges located on the seal member contacted by a cap member. (See Office Action pages 3 and 4). As discussed above, Putnam fails to teach a seal member comprising the ridges which are contacted by the cap member and an outer terminal end portion of the outlet port during compression. Again, Putnam teaches ridges 46 which are engaged by a cap 80. The Putnam ridges are not located on the seal member. In fact, the ridges are not contacted by the cap 80 and the outer terminal end portion of the chimney 44 during compression of a seal member 60 between the cap and the outlet port 40. Therefore, it is submitted that claim 17 as amended defines over the art of record and is in condition for allowance. Moreover, claim 17 depends from claim 16 and is in condition for allowance.

Regarding claim 18, as amended, Applicant respectfully submits that Petranek as modified by Putnam fails to teach the seal member raised portion comprising substantially V-shaped bridges. Claim 18 has been amended to depend from claim 17. As indicated above, claim 17 defines over the art of record. Therefore, it is respectfully submitted that amended claim 18 which depends from claim 17 is in condition for allowance.

Regarding claim 19, as amended, and as indicated above with respect to amended claim 4, Putnam fails to teach a rib located on an outer terminal end portion of an outlet passage which contacts the cap. Again, Putnam discloses longitudinal ridges 46 located

on an outer peripheral of the chimney 44 for engaging the cap 80. Therefore, it is submitted that amended claim 19, which depends from claim 18, defines over the art of record and is in condition for allowance.

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Petranek in view of Edwards (U.S. Patent No. 6,695,757). Claim 6 depends from amended claim 1 and as such is in condition for allowance.

Claims 8-15 and 23-29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Petranek in view of Jones (U.S. Patent Application Publication No. 2002/0191059).

Claims 8-14 depend from claim 1 and as such are in condition for allowance.

Claim 15 has been cancelled.

With respect to claim 23, as amended, Applicant respectfully submits that the subject matter differs from Petranek in view of Jones.

Claim 23, as amended, calls for a seal member for an ink container comprising a lower surface and an upper surface located on an opposite side of the seal member from the lower surface. A wall extends between the lower and upper surfaces. The wall has a tapered surface extending between the lower surface and the upper surface. The upper surface has a larger diameter than the lower surface. The seal member has a substantially disk shape. The lower and upper surfaces each comprises a raised portion extending across the surfaces.

Conversely, as set forth above, Petranek discloses a rhombus-shaped fitting 18 attached via a thermal seal to an ink supply bag 16 within an elongated opening 26 in the bag. During the thermal seal of the bag to the fitting, a small amount of melted material from the bag flows between parallel ribs 28 along opposite longitudinal sides of the fitting 18 to provide a leakproof seal between the bag and the fitting. Extending from a longitudinal planar face 40 of the fitting is an integral ink egress snout 20 for discharging an ink supply from the bag. A pair of plastic housing halves 12 and 14 are connected to form the ink cleaner cartridge 10. The housing has respective bottom wall portions 48 and 50

having opening halves 52 and 54 that form a single bottom opening configured to receive the fitting. Accordingly, assuming, *arguendo*, that the parallel ribs 28 are the claimed raised portions located on the seal member, such ribs are not located on the lower and upper surfaces of fitting 18. The ribs extend along the longitudinal sides of the fitting. Located on the lower longitudinal planar face 40 of the fitting is the snout. The snout extends below the bottom wall portions of the housing halves.

Further, Applicant respectfully disagree with the Examiner that Petranek discloses that the longitudinal planar faces 40 of the fitting taper from one longitudinal side to the opposite side. Clearly, as shown in Figures 2 and 3 of Petranek, the longitudinal planar faces 40 of the fitting extend parallel to each other.

The Examiner concedes that Petranek does not teach a disk-shaped seal member (see Office Action page 5). For that limitation, the Examiner relies on Jones. However, assuming that Jones can be properly combined with Petranek, a disc-shaped fitting 18 will still include ridges located along a circumferential wall of the fitting to seal thermally seal the fitting to the bag 16. Such circumferential ribs 26 and the longitudinal planar faces 40 of a disc-shaped fitting 18 will not meet the raised portions limitations of amended claim 23.

Accordingly, Petranek as modified by Jones fails to teach or even remotely suggest the limitations of amended claim 23. Therefore, it is respectfully submitted that amended claim 23, and claims 24-29 dependent or ultimately dependent thereon, define over to prior art.

With respect to claim 29, as amended, Applicant respectfully submits that the subject matter differs from Petranek in view of Jones. Claim 29, as amended, requires that the upper and lower surfaces of the seal member together form a generally toroidal-shaped portion. Neither Petranek nor Jones disclose a seal member having upper and lower faces which together form a generally toroidal-shaped portion. Therefore, it is respectfully submitted that amended claim 29 defines over the art of record and is in condition for allowance. Moreover, amended claim 29 depends from claim 23 and is in condition for allowance.

Claims 20 and 22 depend from amended claim 16 and are in condition for allowance.

Regarding claim 21, which was not mentioned specifically by the Examiner, as amended, Applicant submits that Petranek as modified by Putman fails to teach a seal member including a thin membrane extending across an inner periphery of the seal member adjacent a first surface of the seal member. The Examiner concedes that Petranek does not teach a seal member including a thin membrane extending across a first surface of the seal member (see Office Action page 4). For that teaching, the Examiner relies on Putman. However, Applicant submits that Putnam teaches a seal member or grommet 60 inserted into an opening 42 of the outlet port 40. The grommet prevents the flow of ink through the outlet port other than through the ink supply needle. The grommet is a generally cup-shaped silicon member with a flexible membrane and is disposed with an open end 62 facing toward the interior of the ink tank cartridge housing 10. A web 63 of material is disposed closely adjacent an outer end 64 which closes the grommet forming an ink-type seal at the grommet end. The closed end of the grommet is subsequently pierced by a needle associated with a printer to create an ink supply. As shown in Figure 2B, the web material does not extend across an inner periphery of an annular-shaped seal member adjacent a first surface of the seal member. Therefore, it is submitted that claim 21 as amended defines over the art of record and is in condition for allowance. Moreover, claim 21 depends from claim 16 and is in condition for allowance.

U.S. Serial No. 10/774,580
Attorney Docket No. NUKZ 2 00339
Response to Office Action dated January 23, 2006

CONCLUSION

All formal and informal matters have been addressed. For the reasons detailed above, it is respectfully submitted all claims remaining in the application are now in condition for allowance.

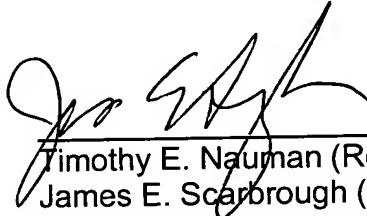
No additional fee is believed to be required for this Amendment. If, however, a fee is due, the Commissioner is authorized to charge our Deposit Account No. 06-0308.

In the event the Examiner believes a telephone call would expedite prosecution, he is invited to call the undersigned.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

Date: 7/21/06



Timothy E. Nauman (Reg. No. 32,283)
James E. Scarbrough (Reg. No. 47,056)
1100 Superior Avenue - 7th Floor
Cleveland, Ohio 44114-2579
(216) 861-5582 (phone)
(216) 241-1666 (facsimile)

CERTIFICATE OF MAILING OR TRANSMISSION	
I hereby certify that this correspondence (and any item referred to herein as being attached or enclosed) is (are) being	
<input checked="" type="checkbox"/>	deposited with the United States Postal Service as First Class Mail, addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.
<input type="checkbox"/>	transmitted to the USPTO by facsimile in accordance with 37 CFR 1.18 on the date indicated below.
Express Mail Label No.:	Signature: <u>Kara L. Krist</u>
Date: July 21, 2006	Name: Kara L. Krist